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(U) CHINA: TRANSPORTATION AND ENERGY STILL THE MOST SERIOUS ECONOMIC BOTTLENECKS

~~(C)~~ Summary

Lack of transportation may be displacing energy shortages as China's biggest economic bottleneck, at least in the short term. Although energy clearly remains China's most serious long-term concern, recent rapid economic growth is adding strain to an already overburdened transportation system suffering from years of neglect.

Disruption of industrial supply due to scheduling problems will likely become increasingly frequent. The shortage of adequate cargo capacity is exemplified by reports of continued problems in moving coal from the mine: This winter more than 350,000 tons were said to have been piled up outside the Pingdingshan mine in Henan. Increasing resources are now being devoted to modernizing and expanding China's rail, highway, inland waterway, airline, and coastal shipping systems.

Although current efforts to solve transportation and energy problems hold out considerable long-term potential, relief will come slowly. Indeed, in the short term, energy problems are likely to intensify rather than improve, given the disappointing results thus far of offshore oil exploration. In sum, energy will remain a major constraint on China's economic development into the 1990s.

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~~(C)~~ Encouraging Energy Growth

Chinese energy production in the last two years has been unexpectedly good, fueled by the leadership's realization in the late 1970s that onshore

oil production was peaking and that overexploitation of existing coal mines was leading to declines in production. As a result of this realization, the government is escalating investment in energy development.

(U) Table 1

Investment in Energy and Transportation, 1983-84
(billion yuan)

	1983	%*	1984	%*	% change
Energy	12.7	21.3	15.8	21.5	25.1
Transportation and Communications	7.8	13.1	10.5	14.3	34.2

* Percentage of total capital construction expenditures.

Source: Official Chinese figures.

Petroleum workers have made a number of new finds, particularly in north China. In addition, old fields like those at Daqing have begun to increase output again by utilizing more intense exploitation of existing wells and adopting intensive methods of secondary recovery. Much of China's increase in coal production comes from the proliferation of small, locally operated mines.

Primary energy production in 1983 was up 6.7 percent, the fastest pace in five years; in 1984 it jumped again--by 7.4 percent. Production increases were augmented by increasingly successful conservation measures, resulting in 1984, for example, in an energy saving of 20 million metric tons (standard coal equivalent). Gains were achieved in coal, electricity, and even petroleum--despite projections that oil output would begin to decline in the early 1980s. Surprisingly strong energy performance continued in the first quarter of 1985, with petroleum output jumping by 10.3 percent over the same period last year, and coal production up by the same proportion.

(U) Table 2

Energy Output, 1983-84

	1983	% increase	1984	% increase
Coal (mmt)	715	7.4	772	8.0
Crude Oil (mmt)	106.07	3.9	114.53	8.0
Electricity (billion kilowatt hours)	351.4	7.2	374.6	6.6

Source: Official Chinese figures.

(C) Serious Transportation Problems Getting Worse

Investment in transportation, generally given rather low priority until recently, has been subject to wide fluctuations. Railroad investment, for example, averaged as little as 1.18 billion yuan during the First Five-Year Plan (1953-58) but as much as 3.46 billion yuan between 1971 and 1975. Investment levels dropped off substantially between 1976 and 1980, averaging only 2.81 billion yuan per year; rail development was particularly hard-hit during the retrenchment of 1979-81. In 1981, for example, only 1.45 billion yuan, or 3.3 percent of total construction expenditures, went to the railroads. This figure rebounded to 2.46 billion yuan in 1982, but still accounted for only 4.7 percent of the construction budget. In fact, rail investment in the 1976-80 period reached the lowest percentage of capital construction expenditures for any comparable period since 1953--only 6 percent.

The focus of spending on rail development compounded the bottleneck. During the 1950s the leadership decided to develop strategically important lines in the relatively sparsely populated interior at the expense of economically more important lines on the coast and between industrial centers in the north and northeast.

Despite the lack of investment, tight scheduling and improved management have led to significant increases in transport and passenger volume. Cargo transport (in ton/kilometers) was up by

more than 9 percent in 1984, and passenger traffic (in person/kilometers) jumped by more than 15 percent. Opportunities are few, however, for eeking out similar gains in the future.

The leadership finally has decided to devote increased resources to an expensive, long-term transportation development program. During the last two years, budgetary allocations for transport have increased dramatically (Table 1). Rail development alone accounted for 11 percent of construction expenses in 1984. In addition, investment priorities have changed. Much of the budget is now going toward double-tracking and electrifying of heavily used coastal and industrial routes, and substantial foreign investment is being sought to develop dedicated lines for coal shipment. Also, major initiatives are under way to expand port and airport facilities.

Airline Development a Major Component of Modernization Plans

(C/NF) Recent developments--including the appointment in early April of a new Director General of the Civil Aviation Administration of China (CAAC)--suggest that China is making significant progress in implementing ambitious plans for reforming its inefficient airline system. These plans are likely to entail considerable foreign business, ultimately resulting in major improvements in equipment, support facilities, and service.

(C) CAAC is embarking on a major decentralization combined with a substantial expansion of its air fleet and modernization of its ground facilities. Nine prospective regional airlines have already been identified, with a total of as many as 30 seeking CAAC's approval for operating permits. Six principal airlines are expected to dominate major international and national routes. Although it is unlikely that as many as 30 separate airlines will be approved, a number of provincial and local services are expected to be established to handle short-term and low-priority freight and passenger service.

(C) Since 1978, Chinese airline passengers have increased from 2.2 million to 5.5 million. Last year, some 1.25 million prospective passengers were turned away for lack of seats, according to CAAC. The Chinese plan to remedy this problem by purchasing a large number of aircraft from abroad and by negotiating coproduction arrangements for eventual production of foreign planes under license in China. According to a usually reliable Hong Kong newspaper, China has already ordered some 20 aircraft--including US Boeing 747s and 737s, French Airbus A-310s, and Soviet TU-154s--worth more than $1 billion. According to a Chinese press account, CAAC has borrowed $600 million from the Chinese Industrial and

Commercial Bank--four times its 1984 borrowing--for aircraft purchases. Reportedly now under discussion are a deal between CAAC and McDonnell Douglas for 25 DC9s and a $1 billion deal with Boeing for purchase of 747s and 767s.

(~~S/NF/NC~~) It also appears that CAAC is in the process of liberalizing its control over regional airlines for the purchase of aircraft, apparently a sticking point in implementing decentralization. CAAC is said to have recently approved plans for regional airlines to purchase their own aircraft--presumably with ultimate approval by CAAC headquarters--if they can arrange their own foreign financing.

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(~~S/US~~) In addition to outright purchases, CAAC is taking the long-term view of encouraging foreign investment and cooperative production under license. After more than 10 years of negotiation, McDonnell Douglas signed an agreement with the Shanghai Aviation Industry Corporation for a purchase-coproduction arrangement involving 26 MD80s, a deal with an estimated value of between $800 million and $1.2 billion. Under the agreement, China will purchase one aircraft and begin gradually to produce others, moving from simple assembly to component production to full coproduction under license. China and Boeing are reportedly also discussing a coproduction arrangement for 737s.

(~~S/NF~~) Much of the progress in reforming CAAC has apparently been due to pressure from the central leadership. Outgoing Director General Shen Tu--an old army cadre with limited expertise in air operations and very little experience in civilian air service--has been the frequent focus of criticism for the airline's inefficiency and unwillingness to reform. His replacement, the 57-year-old Hu Yizhou, is an aeronautical engineer with airline experience dating back to the Kuomintang-run airlines of pre-1949. Upon taking office, he promised a "thorough overhaul" of CAAC.

(~~S/NF~~) Prognosis

Current reform programs hold the potential for considerable improvement in transportation toward the end of the decade. In the interim, the government is encouraging expansion of private and collective local transportation, including truck lines and small- and medium-scale coastal and river barge traffic. Premier Zhao Ziyang's March work report to the National People's Congress revealed that an increase in short-distance rail transport fees

will be one of only four sets of price reforms in 1985. This measure is designed further to encourage development of short-haul highway and water transport.

Although the prognosis for easing the transport bottleneck appears promising, energy bottlenecks are likely to intensify. Despite impressive increases, energy output has lagged behind China's record levels of industrial growth. In 1984, for example, energy production increased by 7.4 percent while industrial output grew more than 14 percent, straining energy supplies severely. So far, results of offshore oil exploration--long expected to provide the panacea for both energy shortages and China's growing need for foreign exchange--have been disappointing. The cost, technical difficulties, and time involved in developing new onshore petroleum fields, large-scale coal mines, nuclear power plants, and large hydropower projects suggest that energy will remain a key constraint on Chinese economic development until the 1990s.

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